

Abstract

An optical data storage device has a number of storage strata (1, 2, 3) arranged one above the other, each of which has a reflection layer, preferably a metal layer (12, 22, 32), which, in a predetermined optical wavelength range, has an initial absorption of at least 5%, preferably at least 10%, and an initial transmission of at least 5%, preferably at least 10%, and the transmission or reflection of which can be varied selectively by thermal treatment. In a method for writing information to such an optical data storage device, the information is introduced into a respective storage stratum (1, 2, 3) by means of a writing laser (40) by local variation of the optical properties, to be precise preferably initially at the storage stratum (1) lying closest to the focusing optical system of the writing laser (40) and progressing from there from storage stratum to storage stratum, the transmission or reflection being set in a respective storage stratum (1, 2, 3) by thermal treatment (41).

(Figure 4)